

REMARKS

Prior to entry of this amendment, claims 1-15 are currently pending in the subject application. By the instant amendment, claims 1, 4, 7, 9, 11 and 13-15 are amended and claims 16-19 are added. Claims 1 and 11 are independent.

Applicants appreciate the Examiner's acknowledgement of applicants' claim for foreign priority and receipt of a certified copy of the priority document.

Applicants also appreciate the Examiner's acceptance of the drawings filed on April 23, 2004.

Applicants further appreciate the Examiner's consideration of the Information Disclosure Statements filed on April 23, 2004, and November 1, 2004.

Applicants respectfully request that, in the next Office action, the Examiner indicate that the Information Disclosure Statements filed on July 7, 2005, and June 22, 2006, have been considered.

Claims 1-19 are presented to the Examiner for further or initial prosecution on the merits.

A. Introduction

In the outstanding Office action, the Examiner indicated that the Information Disclosure Statement filed on July 7, 2005, was not considered for failing to comply with 37 C.F.R. § 1.98(a)(2); rejected claim 4 under 35 U.S.C. § 101 as being directed to non-statutory subject matter; rejected claim 15 under 35 U.S.C. § 112, second paragraph, on the basis that the term "several" is indefinite; rejected claims 1-5 and 11-14 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,385,144 to Yamanishi et al. ("the Yamanishi et al. reference"); and rejected claims 6-10 and 15 under 35 U.S.C. § 103(a) as being unpatentable over the Yamanishi et al. reference in view of U.S. Patent No. 4,819,752 to Zelin ("the Zelin reference").

B. Non-consideration of Information Disclosure Statement

In the outstanding Office action, the Examiner indicated that the Information Disclosure Statement (IDS) filed on July 7, 2005, was not considered for failing to comply with 37 C.F.R. § 1.98(a)(2). In particular, the Examiner stated,

The information disclosure statement filed July 7, 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed.

Office action of May 4, 2006, at paragraph no. 1, page 2.

Applicants respectfully submit that the July 7th IDS was properly filed with a legible copy of Korean Patent Publication No. 10-0340240 and an English language abstract thereof. Applicants have included herewith a copy of the stamped postcard receipt as proof of the inclusion of the Korean Patent Publication with the IDS.

Additionally, applicants have included herewith a photocopy of Korean Patent Publication No. 10-0340240, as well as the English language abstract thereof, for inclusion in the file. Applicants respectfully request that, in the next Office action, the Examiner indicate that the July 7, 2005, IDS has been considered.

C. Rejection of Claim 4 under 35 U.S.C. § 101

In the outstanding Office action, the Examiner rejected claim 4 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicants respectfully submit that the claim as originally filed is directed to statutory subject matter, for at least the reason that it depends from a claim that recites statutory subject matter, viz., claim 1. Nonetheless, claim 4 is amended by the instant amendment in order to advance prosecution of the subject application. Therefore, applicants respectfully request that this rejection be reconsidered and withdrawn.

D. Asserted Indefiniteness Rejections of Claim 15

In the outstanding Office action, the Examiner rejected claim 15 under 35 U.S.C. § 112, second paragraph, on the basis that the term “several” is indefinite. By the instant amendment, claim 15 is amended. Applicants respectfully submit that claim 15 is not indefinite under 35 U.S.C. § 112, second paragraph, and respectfully request that this rejection be reconsidered and withdrawn.

E. Asserted Anticipation Rejection

In the outstanding Office action, the Examiner rejected claims 1-5 and 11-14 under 35 U.S.C. § 102(b) as being anticipated by the Yamanishi et al. reference, for which the Examiner additionally relied on U.S. Patent No. 3, 799,672 to Vurek (“the Vurek reference”). Independent claims 1 and 11 are amended by the instant amendment and recite, *inter alia*, “calculating a ratio of DC components of the first and second electric signals.” No new matter is added, and support for the instant amendment can be found in the application as originally filed at, e.g., FIGS. 6 and 7, and paragraphs [0047] and [0048].

Applicants respectfully submit that the Yamanishi et al. reference, whether alone or in combination with the Vurek reference, fails to disclose, or even suggest, calculating a ratio of DC components of the first and second electric signals, as presently recited in claims 1 and 11. For example, the Yamanishi et al. reference describes separate AC/DC units 14 and 15, one each for red and infrared signals, the AC/DC units dividing an AC component of each signal by a DC component of each signal. *See the Yamanishi et al. reference at FIGS. 3(a) and 3(b), and col. 2, lines 53-59.* Moreover, the Yamanishi et al. reference describes using an analog-to-digital converter to process signals, whereby rise and fall times T1 and T2 are determined based on peaks and valleys in the signals. *See the Yamanishi et al. reference at FIGS. 3(a) and 3(b), and col. 2, lines 59-63.* The rise and fall

times T1 and T2 are then used to determine whether sleep apnea is present. *See the Yamanishi et al. reference at col. 3, lines 29-35.*

Therefore, not only does the Yamanishi et al. reference fail to describe calculating a ratio of DC components of the first and second electric signals, as presently recited in claims 1 and 11, the Yamanishi et al. reference uses an analog-to-digital converter to determine the presence of sleep apnea, whereas no analog-to-digital converter is required by the apparatus recited in claims 1 and 11. For example, an apparatus according to an embodiment of the present invention may include a sample-and-hold unit for sampling the signals. *See, e.g., paragraph [0033] of the application as originally filed.*

In view of the above, applicants respectfully submit that claims 1 and 11, as well as claims 2-5 and 12-14 depending therefrom, are allowable over the cited prior art.

Therefore, applicants respectfully request that this rejection be reconsidered and withdrawn.

F. Asserted Obviousness Rejection

In the outstanding Office action, the Examiner rejected claims 6-10 and 15 under 35 U.S.C. § 103(a) as being unpatentable over the Yamanishi et al. reference in view of the Zelin reference. Claims 6-10 and 15 depend from claims 1 and 11, respectively. Applicants respectfully submit that the Zelin reference fails to disclose, or even suggest, the teachings noted above as missing from the Yamanishi et al. reference. Accordingly, claims 6-10 and 15 are believed to be allowable for at least the reasons set forth above regarding claims 1 and 11. Therefore, applicants respectfully request that this rejection be reconsidered and withdrawn.

G. New Claims

Dependent claims 16-19 are added by the instant amendment. No new matter is added, and support for the instant amendment can be found in the application as originally filed at, e.g., FIGS. 6 and 7, and paragraphs [0047]-[0050]. Applicants respectfully submit

that claims 16-19 are allowable for at least the reasons that their respective base claims are allowable. Applicants respectfully request entry and examination of claims 16-19.

H. Conclusion

The remaining documents cited by the Examiner were not relied on to reject the claims. Therefore, no comments concerning these documents are considered necessary at this time.

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,

LEE & MORSE, P.C.

Date: August 4, 2006

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Attachments:

Copy of stamped return receipt postcard for the IDS of July 7, 2005
Copy of Korean Patent Publication No. 10-0340240

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PETITION and
DEPOSIT ACCOUNT CHARGE AUTHORIZATION

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.